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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,602	03/01/2004	Lyndsay Williams	MI103.70797US00	9169
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MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052-6399			EXAMINER BERTRAM, ERIC D	
			ART UNIT 3766	PAPER NUMBER
			NOTIFICATION DATE 03/03/2011	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ntovar@microsoft.com

p5docket@microsoft.com

# Office Action Summary

**Application No.**

10/790,602

**Applicant(s)**

WILLIAMS ET AL.

**Examiner**

Eric D. Bertram

**Art Unit**

3766

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.4-7-9,13-17,20,21,29-33 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.4-7-9,13-17,20,21,29-33 and 44-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 12/14/2010 have been fully considered but they are not persuasive. The applicant initially argues that the 101 rejections are not proper. However, attention is directed to the Notice from David Kappos, dated 1/26/2010, which requires any claims reciting a "computer readable storage medium" to be rejected under 35 USC 101 unless the phrase "non-transitory" is added to the claims. The notice is attached to this action for the convenience of the applicant.
2. The applicant further argues that Yoshihiro does not have a controller that determines whether to capture an image based on a change in ambient light. However, applicant admits that Yoshihiro discloses a camera that automatically captures images (see page 8 of the arguments). Applicant further admits that camera detects a change in luminosity in portions of the image, and then automatically captures an image (see page 9 of the arguments). There must necessarily be a controller or processor that controls these functions. The applicant further argues that detecting a change in luminosity of a portion of the environment in the view of the environment does not constitute a change in "ambient light". However, applicant then states that "ambient light, are characteristics of the environment." The luminosity of a portion of the environment in an image is a characteristic of the environment detected by the camera. All pending rejections depended on the arguments presented against Yoshihiro, which have been addressed. As such, the rejections of claims 1, 4, 7-9, 13-17, 20, 21, 29-33 and 44-48 are still considered proper.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 32 is rejected under 35 U.S.C. 101 because the broadest reasonable interpretation (BRI) of a claim drawn to a computer readable medium covers forms of non-transitory tangible media as well as transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media. See MPEP 2111.01. Since the BRI of the claims covers a signal *per se*, the claim is rejected as covering non-statutory subject matter. In order to overcome this rejection, the applicant may add the phrase "non-transitory" in front of "computer readable medium".

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 33 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshihiro et al. (JP 2000-196934, hereinafter Yoshihiro; paragraph references are to the English translation).
7. Yoshihiro discloses a digital media player shown in figure 1 which includes a digital camera 100 that stores digital media in flash memory 50 and displays digital media on LCD display 40 (par. 0017, 0020, 0026-0028). An environmental sensor

detects the ambient light, and when a change in the ambient light is above a first threshold, a controller causes capture of an image. If the change in ambient light is not above a first threshold, then no image is captured (par. 0040-0042 and abstract).

8. Regarding claim 46, since the environmental sensor of Yoshihiro is configured to changes in ambient light in order to adjust the shutter timing, this would inherently include any changes in ambient light due to movement of the environmental sensor from one room to another. Furthermore, it is important to note that the current claims, nor the applicant's specification, disclose actually detecting or determining a change in rooms. All that is disclosed is that a change in ambient light "can indicate movement of the wearer from one room to another" (see page 6 of the specification). A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1, 7, 15, 17, 30-32, 44, 45 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro in view of Lemelson (US 4,901,096).

13. Regarding claims 1, 17, 32, 44 and 45, Yoshihiro discloses a digital media player shown in figure 1 which includes a digital camera 100 that stores digital media in flash memory 50 and displays digital media on LCD display 40 (par. 0017, 0020, 0026-0028). An environmental sensor detects the ambient light, and when a change in the ambient light is above a first threshold, a controller causes capture of an image. If the change in ambient light is not above a first threshold, then no image is captured (par. 0040-0042 and abstract).

14. However, Yoshihiro is silent as to using an accelerometer to determine whether to capture an image. Attention is directed to the secondary reference of Lemelson,

which discloses a portable recall device 10 configured to be carried by a user (read as a wearer), which includes a camera 10A (see figure 1 and Col. 1, lines 8-12). Lemelson further discloses an accelerometer 16 operably connected to the camera that will only allow capture of an image if a stable condition is detected (Col. 3, lines 12-29). If the movement of the accelerometer exceeds a threshold, an image will not be captured. Lemelson further discloses an environmental sensor that senses ambient light external to the user. Only after the device has become stable, i.e., the acceleration is below a threshold, is the camera triggered to open its shutter and capture an image. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the camera of Yoshihiro to include the accelerometer and capture an image when acceleration is below a threshold in order to eliminate the capture of blurry or distorted images (motivation found in Col. 1, lines 5-13 of Lemelson).

15. Regarding claim 7, since the environmental sensor of Yoshihiro is configured to changes in ambient light in order to adjust the shutter timing, this would inherently include any changes in ambient light due to movement of the environmental sensor from one room to another. Furthermore, it is important to note that neither the current claims, nor the applicant's specification, disclose actually detecting or determining a change in rooms. All that is disclosed is that a change in ambient light "can indicate movement of the wearer from one room to another" (see page 6 of the specification). A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably

distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

16. Regarding claims 15, 30 and 32, Yoshihiro discloses that the capture of the image is delayed by a predetermined amount, e.g., 2 seconds (par. 0042-0043).

17. Regarding claim 31, a user of a camera will inherently (or at least obviously) review the images taken by the camera at a later point in time.

18. Regarding claims 49 and 50, a user will necessarily play back and view the captured images and the images will necessarily aid a person in remembering the activity in the image.

19. Claims 4, 8, 20 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro and Lemelson in view of Ishibashi (US 6,558,050).

Yoshihiro, as described above, discloses the applicant's basic invention, but is silent as to recording ambient sounds. Ishibashi discloses a portable recall device 1 that is configured to be carried by a wearer as shown in figure 1. The device includes a camera, as well as a three dimensional head orientation detecting unit 4 (Col. 2, lines 30-56), and a "microphone 22 that takes in sounds around the wearer and voices of the wearer, too...Using this data, the controller 5 checks whether the wearer is speaking or not" (Col. 2, lines 57-60). If in step #10 a capture condition is detected in that the wearer is found not to be speaking by monitoring ambient conditions (Col. 4, lines 21-40), and if this capture condition is followed by the detection of a stable head orientation by the head orientation detecting unit at step #50, then a shooting instruction is outputted to the video camera circuit (Col. 4, lines 48-49). Therefore, Ishibashi



discloses that the use of ambient sounds as a capture condition for a camera is old and well known in the art, and the incorporation of this feature in the analogous art of Yoshihiro would have been obvious to one of ordinary skill in the art at the time of the applicant's invention.

20. Regarding claims 4 and 20, Ishibashi discloses the audio data may be recorded in recording unit 12 (Col. 3, lines 15-18)

21. Claims 5, 6, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro and Lemelson in view of Horimoto (US 4,009,943). Yoshihiro, as described above, discloses the applicant's basic invention with the exception of using a wide-angle, fish-eye lens. However, the use and advantages of a wide-angle, fish-eye lens is notoriously old and well known in the art, as taught by Horimoto (Col. 1, lines 11-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of Yoshihiro by including a wide-angle, fish-eye lens in order to capture the true perspective of what the actual object would appear to an observer (Col. 1, lines 13-18).

22. Claims 13, 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro and Lemelson in view of Grosvenor et al. (US 2003/0025798, hereinafter Grosvenor). Yoshihiro, as described above, discloses the applicant's basic invention, including the use of an accelerometer to detect motion of a user and a camera held by the user. However, Yoshihiro is silent as to using a plurality of accelerometers or a gyroscope to detect the motion. While the use of gyroscopes and/or accelerometers are notoriously old and well known in the art for detecting rotational/angular movement

of an object, attention is directed to the secondary reference of Grosvenor, which discloses the use of one or more gyroscopes or accelerometers to measure movement of a camera that is attached to a user (par. 0068). Specifically, Grosvenor discloses the use of a plurality of accelerometers for detecting rotation along three axes (par. 0069). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of Yoshihiro n by using at least one gyroscope or a plurality of accelerometers to detect angular/rotational movement since Grosvenor demonstrates that they would be fully capable of detecting the motion of the user and the camera held by the user, which would help guarantee a stable condition, as required by Yoshihiro.

23. Claims 9, 16 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro and Lemelson in view of Moultrie, Jr. (US 2002/0159770, hereinafter Moultrie). Yoshihiro, as described above, discloses the applicant's basic invention with the exception of the capture condition comprising detecting a change in the signal from a passive infrared detector triggered by heat from a person in the proximity of the camera. Attention is directed to the secondary reference of Moultrie, which discloses a camera that is activated by detecting a change in the signal from a passive infrared detector triggered by heat from an animal in the proximity of the camera (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art to modify the camera of Yoshihiro by adding capture condition detection with an infrared sensor as taught by Moultrie in order to make the system automatic and allow the user to take images of interest without having to be with the camera.

***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D. Bertram whose telephone number is (571)272-3446. The examiner can normally be reached on Monday-Friday from 10-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on 571-272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric D. Bertram/  
Primary Examiner, Art Unit 3766